

Title (en)

MEDICAL DEVICE WITH COATING THAT PROMOTES ENDOTHELIAL CELL ADHERENCE AND DIFFERENTIATION

Title (de)

MEDIZINISCHE VORRICHTUNG MIT EINEM ÜBERZUG ZUR FÖRDERUNG DER ANHAFTUNG UND DIFFERENZIERUNG VON ENDOTHELZELLEN

Title (fr)

DISPOSITIF MEDICAL RECOUVERT D'UN REVETEMENT QUI FACILITE LA FIXATION ET LA DIFFERENCIATION DE CELLULES ENDOTHELIALES

Publication

EP 1471853 A2 20041103 (EN)

Application

EP 03715988 A 20030206

Priority

- US 0303645 W 20030206
- US 35468002 P 20020206

Abstract (en)

[origin: WO03065881A2] Compositions and methods are provided for producing a medical device such as a stent, a stent graft, a synthetic vascular graft, heart valves, coated with a biocompatible matrix which incorporates antibodies, antibody fragments, or small molecules, which recognize, bind to and/or interact with a progenitor cell surface antigen to immobilize the cells at the surface of the device. The coating on the device can also contain a compound or growth factor for promoting the progenitor endothelial cell to accelerate adherence, growth and differentiation of the bound cells into mature and functional endothelial cells on the surface of the device to prevent intimal hyperplasia. Methods for preparing such medical devices, compositions, and methods for treating a mammal with vascular disease such as restenosis, atherosclerosis or other types of vessel obstructions are disclosed.

IPC 1-7

A61F 2/06

IPC 8 full level

A61F 2/06 (2006.01); **A61F 2/82** (2013.01); **A61F 2/84** (2006.01); **A61K 31/721** (2006.01); **A61K 39/395** (2006.01); **A61L 17/00** (2006.01); **A61L 27/00** (2006.01); **A61L 27/34** (2006.01); **A61L 27/54** (2006.01); **A61L 29/00** (2006.01); **A61L 31/00** (2006.01); **A61L 31/10** (2006.01); **A61L 31/16** (2006.01); **A61M 1/14** (2006.01); **A61M 25/00** (2006.01); **A61M 29/02** (2006.01)

IPC 8 main group level

A61B (2006.01); **A61L** (2006.01)

CPC (source: EP KR)

A61F 2/07 (2013.01 - KR); **A61F 2/24** (2013.01 - KR); **A61K 31/721** (2013.01 - EP KR); **A61L 27/34** (2013.01 - EP KR); **A61L 27/54** (2013.01 - EP); **A61L 29/04** (2013.01 - KR); **A61L 31/10** (2013.01 - EP KR); **A61L 31/16** (2013.01 - EP KR); **A61M 25/00** (2013.01 - KR); **A61L 2300/256** (2013.01 - EP)

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PT SE SI SK TR

DOCDB simple family (publication)

WO 03065881 A2 20030814; **WO 03065881 A3 20031030**; AU 2003219718 A1 20030902; AU 2003219718 A8 20030902; CA 2472031 A1 20030814; CA 2472031 C 20080916; CN 100455275 C 20090128; CN 101502674 A 20090812; CN 1627924 A 20050615; EP 1471853 A2 20041103; EP 1471853 A4 20100324; EP 1471853 B1 20170322; IL 162803 A0 20051120; IL 162803 A 20101230; JP 2005523050 A 20050804; KR 20040105704 A 20041216

DOCDB simple family (application)

US 0303645 W 20030206; AU 2003219718 A 20030206; CA 2472031 A 20030206; CN 03803370 A 20030206; CN 200810184315 A 20030206; EP 03715988 A 20030206; IL 16280303 A 20030206; IL 16280304 A 20040701; JP 2003565314 A 20030206; KR 20047011431 A 20030206